**Mass Extinctions & The Fossil Record**

*4.2.3 Discuss current estimates of numbers of species and past and present rates of species extinction.*

**Using your time line sketch the relative position of the 6 mass extinctions onto the line. Label each with its name and dates.**

Fill in the following chart using your timeline and any outside research you may need.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Event | | When? | Possible Causes? | Major Changes? | What did Earth look like? |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |

**Part 2. Looking at the Data**

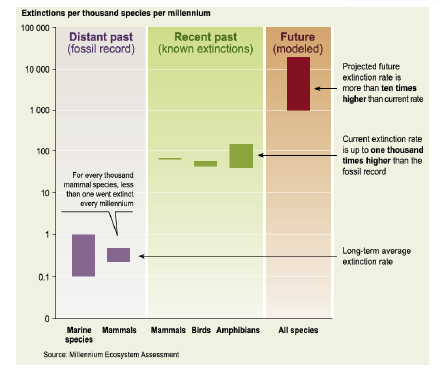


Figure 1. The rate of extinctions at various times

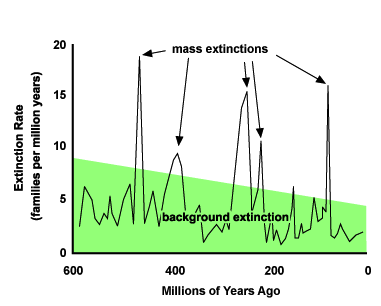


Figure 2. Extinctions

1. Looking at Figure 1, summarize what you think this figure is saying about the scale (the rate) of extinctions over time.

2. Looking at Figure 1, hypothesize what kinds of organisms (they don’t have to be only the ones listed) are more likely to become extinct? Why do you think models show all organisms in more danger in the future?

3. Looking at Figure 2, what are TWO differences between mass extinctions and background extinctions?

4. Looking at Figure 2, describe what happens to the slope of the line immediately following a mass extinction event. Why do you think the recovery line is always very steep?